## MOUNT WILSON OBSERVATORY

The positions and areas of sun spots furnished by the Mount Wilson Observatory for publication in the Monthly Weather Review are taken from the daily records of the magnetic polarities of sun spots. These records are made at the 150-foot telescope by projecting the image of the sun, mean diameter 42.8 centimeters, upon a sheet of paper and sketching the spots. The heliographic latitude and longitude of each group is read from a disk on which the circles of solar longitude and the parallels of latitude have been drawn for every 10 degrees. Twenty of these disks are available for different diameters of the image and different values of the heliographic lati-

tude of the sun's center.

To determine the areas a réseau, ruled to square millimeters, is placed on the sketch and the area of each group counted in square millimeters. The areas are then reduced to millionths of the visible hemisphere, taking into account the actual diameter of the image. The distance of each group from the center of the disk is then measured and the projection factors obtained to correct the areas for foreshortening.

The solar photographs made at the 60-foot tower telescope, sun's mean diameter 17.1 centimeters, are compared with the sketch and, if any spots have been omitted, they are measured on the photograph by methods similar to those described in the Greenwich Photoheliographic Results.—Seth B. Nicholson.

Positions and areas of sun spots

Date	Eastern standard civil time	Heliographic		Area	
		Longi- tude	Latitude	Spot	Group
Jan. 1 (Mount Wilson,)	Hr. min. 13 35	-65. 0 -21. 0 +7. 5	+20.0 +9.5 -8.0	39	385 625
Jan. 13 (Mount Wilson.)	14 20	+49. 0 +62. 0 -78. 0 -59. 0 +19. 0 +31. 0	-11. 0 +19. 0 +27. 0 -20. 0 -20. 0 +8. 0	10	7 594 32 255
Jan. 14	13 40	+40. 0 +66. 0 +70. 0 -87. 0 -62. 0 -43. 0 +45. 0	-17. 5 +21. 0 -16. 0 -13. 0 +26. 0 -18. 0 +8. 0	199	197 499 740 8
Jan. 23 (Mount Wilson.)	17 30	+55. 0 +83. 0 -57. 0 +30. 0 +30. 5 +62. 0	-17. 0 -18. 0 -6. 0 +34. 0 -15. 0 +26. 0		16 59 55 181 427 529
Jan. 28 (Mount Wilson.)	11 5	+65. 0 -84. 0 -71. 0 -58. 0 -7. 0	+10.0 -12.0 +12.0 -17.0 -9.0	44	35 246 21 25
Feb. 1(Naval Observatory.)	11 54	+7. 5 +41. 0 +58. 0 -67. 5 -59. 0 -38. 5 -35. 0 -17. 0 -7. 0	-8.5 -11.0 +13.0 +22.0 +22.0 -28.0 -13.5 +11.0 -15.5	154	62 247 309 185 370
Feb. 2	11 51	+34.5 -79.0 -70.0 -53.5 -45.0 -27.5 -27.0 -17.5	-15.5 +11.0 +17.0 +24.0 +24.5 -15.5 -27.5 -11.0	123 93	62 31 309 154
		-6.0 0.0 +6.0 +47.5	+13.5 +11.0 -15.5	108	46 463 525

## Positions and areas of sun spots-Continued

Date	Eastern standard	Heliographic		Area	
	civil time	Longi- tude	Latitude	Spot	Group
Feb. 3 (Naval Observatory.)	Hr. min. 11 47	-80.0 -64.0 -57.5 -40.5 -32.0 -18.0 -14.0 -4.5	0 +9.5 +15.0 +22.5 +24.5 +24.5 +23.0 -16.0 -28.0 -11.0	154 123 154 15 15	2 6 30 12
Feb. 4. (Naval Observatory.)	13 47	+8.0 +12.5 +19.5 +61.0 -70.0 -49.5 -42.5 -17.0 -5.5 -4.0 +1.0 +4.5 +10.5	+15. 5 +11. 0 -16. 0 -17. 5 -14. 0 +10. 0 +15. 5 +25. 0 -28. 0 -16. 0 -11. 0	93 31 15	46 52 37 9 2 37 6 1
Feb. 5(Harvard.)	11 21	+28. 0 +35. 5 +75. 0 -51. -34. -28. +12.	+11.0 -15.0 -18.0 -13. +10. +15. -14.	73	27 46 36
Peb. 6 (Mount Wilson.)	18 20	+15. +38. +46. -67. 0 -43. 0 -24. 5 -24. 0 -20. 0	-26. +9. -14. +13. 0 -8. 0 -14. 0 +7. 5 -12. 5	56 174 10	19 78 1
Feb. 7. (Naval Observatory.)	11 53	-11. 0 +12. 0 +30. 0 +33. 0 +58. 0 -56. 0 -33. 0 -30. 5 -15. 5 -15. 5 -15. 5 +29. 0 +39. 0	+10.0 +16.0 +126.0 -17.0 -28.0 +12.0 -13.0 +14.0 -7.5 -14.0 +16.0 +25.0 -17.5 -28.0	133 204	50
reb. 8(Harvard.)	10 31	+43. 0 +66. 0 +78. 5 -79. -53. -16. -17. 0. +3.	+11. 0 -13. 0 -23. +20. -12. -6. -12. +6.	123 175 49	5,
reb. 9 (Naval Observatory.)	11 48	+4. +12. +40. +47. +51. +78. -67. 0 -4. 5 -4. 0 +16. 0 +18. 5 +26. 5 +37. 0	+9. +14. +22. -18. -30. +9. -27. 5 -8. 0 -15. 0 +5. 5 +10. 0 +17. 0 +26. 5	362 88 170 123	20 46 27
eb. 10(Naval Observatory.)	11 48	+58. 0 +64. 0 +70. 0 -54. 5 +8. 5 +9. 5 +29. 0 +31. 5	+25.5 -17.0 -29.0 -28.0 -8.0 -15.5 +5.5 +10.0	43 123 	1: 3d 4: 2
reb. 11(Naval Observatory.)	11 47	+40.0 +69.0 +82.0 +83.0 -83.0 -41.0 +24.0 +44.0	+17. 0 +25. 0 -17. 0 -29. 0 -13. 0 -28. 0 -8. 0 -15. 0	123 62 123 123	33
Feb. 12 (Naval Observatory.)	11 56	+44.0 +45.5 +51.0 +59.5 -68.0 -28.0 +37.5 +39.0	+5.5 +10.0 +16.0 +18.0 -13.0 -28.5 -8.0 -13.5	62 123	2 2 1 1 1 4